JAN 28 1929

PHYSIOLOGICAL REVIEWS

Medical Library

EDITED FOR

THE AMERICAN PHYSIOLOGICAL SOCIETY

CONTENTS

	Page
THE MUSCULATURE OF THE BRONCHI AND LUNGS. *Charles Clifford Macklin*	1
THE RESPIRATORY QUOTIENT. *Henry B. Richardson*	61
BIOCHEMICAL INVESTIGATION OF VITAMIN B. *H. D. Kruse and E. V. McCollum*	126

VOL. IX, No. 1

Issued January, 1929

BALTIMORE, U. S. A.

Entered as second-class matter, January 15, 1921, at the Post Office at Baltimore, Md., under the act of March 8, 1879

Made in United States of America

PHYSIOLOGICAL REVIEWS

PHYSIOLOGICAL REVIEWS is owned and controlled by the American Physiological Society. It is edited by a board appointed by the society consisting of:

W. H. HOWELL, Baltimore
LEO LOEB, St. Louis
J. J. R. MACLEOD, Aberdeen, Scotland
A. J. CARLSON, Chicago
P. A. SHAFFER, St. Louis
TORALD SOLLMANN, Cleveland

D. R. HOOKER, Managing Editor, Baltimore

The Editorial Board selects the subjects and authors of all articles which are published, the aim being to provide concise but comprehensive reviews of the recent literature and present status of various subjects in Physiology, using this term in a broad sense to include Bio-chemistry, Bio-physics, Experimental Pharmacology and Experimental Pathology. Each volume will consist of from sixteen to twenty articles, making a total of about five hundred pages per volume. The numbers will be issued quarterly in January, April, July and October of each year.

Subscriptions will be received in advance only. The subscription price is:

$6.00 per volume in the United States, net postpaid
$6.25 per volume in Canada, net postpaid
$6.50 per volume elsewhere, net postpaid
$2.50 per single number, net postpaid

Subscriptions should be sent to

D. R. HOOKER, *Managing Editor*
19 W. CHASE STREET, BALTIMORE, MD.

Contents of Volume V, 1925

JOSEPH NEEDHAM: The metabolism of the developing egg
CARL VOEGTLIN: The pharmacology of arsphenamine (salvarsan) and related arsenicals
CARROLL G. BULL: Bacteriophage
C. JUDSON HERRICK: Morphogenetic factors in the differentitation of the nervous system
YANDELL HENDERSON: Physiological regulation of the acid-base balance of the blood and some related functions
WM. H. HOWELL: Inhibition
ARNOLD RICE RICH: The formation of bile pigment
E. P. CATHCART: The influence of muscle work on protein metabolism
J. A. DETLEFSEN: The inheritance of acquired characters
VICTOR JOHN HARDING: Metabolism in pregnancy
J. A. MACWILLIAM: Blood pressure in man under normal and pathological conditions
HENRY H. GREEN: Perverted appetites
EDWIN J. COHN: The physical chemistry of the proteins
PAUL E. HOWE: The function of the plasma proteins
FRITZ B. TALBOT: Basal metabolism of children
STANLEY COBB: Review on the tonus of skeletal muscle
ROBERT GESELL: The chemical regulation of respiration
JOSEPH BARCROFT: The significance of hemoglobin in submammalian forms of life
FRANKLIN C. MCLEAN: Edema as a problem in physiological regulation

PHYSIOLOGICAL REVIEWS

VOLUME IX

BALTIMORE, MD.
1929

Medical
Wahr

CONTENTS

No. 1. January, 1929

The Musculature of the Bronchi and Lungs. *Charles Clifford Macklin*.. 1
The Respiratory Quotient. *Henry B. Richardson*..... 61
Biochemical Investigation of Vitamin B. *H. D. Kruse and E. V. McCollum*..... 126

No. 2. April, 1929

The Suspension Stability of the Blood. *Robin Fåhraeus*..... 241
Application of Statistical Methods in Physiology. *Halbert L. Dunn*.... 275

No. 3. July, 1929

Organization for Physiological Homeostasis. *Walter B. Cannon*..... 399
The Position of Phosphorus in the Chemical Mechanism of Muscular Contraction. *P. Eggleton*..... 432
On Cerebral Localization. *Marion Hines*..... 462

No. 4. October, 1929

The Regeneration of Nervous Tissue. *Ferdinand C. Lee*..... 575
Sleep. *Nathaniel Kleitman*..... 624
The Regeneration of Hemoglobin and Erythrocytes. *F. S. Robscheit-Robbins*..... 666